

Remarks

Claims 1 through 10 and 40 through 44 have been canceled. These claims were restricted from the application as being non-elected inventions.

Claim 17 was amended to correct a grammatical error by inserted the word “of” after “one” in line 2.

Claims 11-23, 29-39 and 45-70 are pending.

The Examiner indicated that claims 30-39 and 45-68 are allowed, which is gratefully acknowledged by the Applicants.

Claims 11-23, 29, and 69-70 were rejected in view of WO 95/01556 (the “‘556 application”). Reconsideration of the rejection is respectfully requested in view of the following arguments and remarks.

Claims 11-16 and 69-70 were rejected under 35 USC § 102(b) as being anticipated by the ‘556 application. The ‘556 application discloses in the abstract a strain sensor having a base fixed end 2, a test body 1 extending from the fixed end, and a member 3 extending from the test body. The member 3 provides an input part to which measured forces are applied. The test body 1 is thus disposed between the fixed, reference part 2 and the free ended member 3, and strain in the member 3 is transmitted to the test body 1 to be read by the strain gauges.

The test body 1 is shaped as a truncated pyramid to allow for the measurement of forces in two directions by the strain gauges on each face of the pyramid.

Claims 11 and 69, by contrast, recite a sensor assembly embedded in an elastomeric material having a pyramid shaped body with strain gauges attached to the faces of the pyramid. The sensor assembly according to the invention, in contrast to the device of the ‘556 application, measures forces applied to the faces of the pyramid. There is no separate fixed, reference part; the claimed pyramid in its unstressed state is itself the reference. Moreover, there is no separate member for receiving the application of forces to be measured, which is then transmitted to a test body. Rather, forces are applied directly to the claimed assembly because it is embedded in an elastomeric material.

Thus, in the present invention, the function and the structure to achieve that function differ substantially and patentably from that of the ‘556 application.

Further, the '556 application does not disclose or suggest a sensor embedded in an elastomeric material. The '556 application discloses a device having a member 3 that contacts a thing to be measured, while a fixed part remains apart from the measured thing.

For at least the foregoing reasons, claims 11-16, 23 and 69-70 are allowable over the cited art.

Claims 14-22 and 29 were rejected under 35 USC § 103(a) as being unpatentable over the '556 application.

Claims 14-22 and 29 depend from claim 11 and are allowable at least as depending from an allowable base claim. In addition, the following remarks showing differences between the cited art and the claimed invention are offered for the Examiner's consideration.

Although not mentioned in the Abstract, the '556 application does describe enough of the sensor structure to understand that it does not disclose or suggest a flexible pyramid shaped body that measures forces through the direct application of force to the body. First, as described above, and mentioned in the Abstract, the '556 device consists of three parts, a fixed base, a test body, and a member for receiving the application of a force to be measured.

Further, the '556 device is not flexible nor is it meant to be flexible. As translated by the undersigned, the '556 application, at page 1, lines 10-12 states that the goal of the invention is a rigid and compact sensor. On page 2, lines 12-16, the specification states that the sensor is remarkably compact and one of very great rigidity resulting from the optimal form of the test body. In addition, on page 3, lines 28 to 37, it states that the sensor is a casting of a single material appropriate for extensometer sensors, being of steel or an aluminum alloy. While any material, no matter how hard or rigid, can be said to be deformable on some scale, there is nothing to suggest that a cast block or steel or aluminum is flexible in the way understood in the present application.

Thus, the '556 application does not suggest the invention claimed by claims 14-22 and 29.

For at least the foregoing reasons, Applicants submit that claims 11-23, 29, and 69-70 are allowable over the cited art. Favorable action on the merits is respectfully requested.

The Examiner is invited to telephone the undersigned if there are any questions about the application or this amendment, or if a telephone call would be helpful to expedite prosecution of the application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Martin Farrell", with a long horizontal flourish extending to the right.

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